

Krusz JC. Treatment of Chronic Pain with Zonisamide. Pain Practice 2003;3(4):317-320.

Design: Open label case series

Brief summary of results:

- 55 patients (34 men, 21 women) treated with zonisamide for chronic neuropathic pain at a pain and headache clinic in Dallas
- Neuropathic pain types included spine discogenic (n=38), nerve entrapment (n=7), CRPS (n=7), and facial pain (n=3)
- 49 patients had been refractory to two or more prior treatment attempts with either gabapentin, carbamazepine, divalproex sodium, or topiramate
- Dose was titrated at a starting dose of 100 mg every fourth night for 4 doses, gradually increasing to 100 mg every night, with details of titration based on the investigator's discretion
- Efficacy was based on response to 3 months of zonisamide, defined as percent reduction in daily numeric pain scores from baseline (scale 0-10)
- 42 patients were evaluable after having had a maintenance dosage of zonisamide for 3 months
- Of the 42 patients, 15 had at least 50% reduction in pain scores, 10 had a reduction from 25 to 50%, 8 had less than 25%, and 9 had no response
- 13 patients discontinued the study before having had 3 months of a maintenance dose of zonisamide; 5 for adverse effects (drowsiness, nausea, itching); 4 for noncompliance, and 4 lost to follow-up
- 26 patients who had been taking other medication at baseline (gabapentin etc) were able to discontinue their use
- About 75% of patients who had at least 50% reduction in pain reported dramatic increases in pain-free time per day (7-9 hours vs. 2-3 hours at baseline)

Authors' conclusions:

- Zonisamide may be beneficial for difficult-to-treat patients who have not responded to previous medications
- Because zonisamide has a long half-life (63 hours) it needs to be titrated carefully over a period of up to 2 months
- Controlled studies are warranted to investigate the efficacy of zonisamide

Comments:

- As a case series, this study cannot support an evidence statement about zonisamide, but the authors' conclusion that controlled studies are called for is correct
- There is no description of inclusion/exclusion criteria, nor is there a case definition for neuropathic pain (hyperalgesia, allodynia, etc)
- The nature of the "refractory" response of 49 patients to previous medication is not clearly described

- There was large attrition due to side effects and noncompliance; some of the noncompliance may have been due to side effects
- The increase in “pain-free time” per day very likely had a functional pay-off, but this is not described
- Because of the long half-life, the use of zonisamide would need to be supervised carefully for titration and maintenance doses

Assessment: Inadequate (no description of patient population means that little guidance can be given for appropriate use of zonisamide)